

160-7/5

A
T W E L F T H
L E T T E R
T O S I R J O S E P H B A N K S Baronet
President of the Royal Society,
O N T H E
Subject of Cochineal Insects, discovered at Madras,

By J A M E S A N D E R S O N M. D.

With a Copper Plate Engraving Annexed, of the different INSECTS mentioned in the Letters, from
the Drawings of BARON REICHEL.

Also an Engraving of the *Opuntia Major Spinulis obtusis mollibus, & innocentibus*, and the Plan of
a Nopalry in the Bishoprick of Guaxaca in the Kingdom of Mexico, Extracted from the Second
Volume of SIR HANS SLOANE'S HISTORY OF JAMAICA, for the use of Country Gentlemen
who may be disposed to make Plantations, and are not in possession of that Work.

————— MILESIA MAGNO
VELLERA MUTENTUR, TYRICS INCOCTA RUBORES.
VIRG. GEOR. LIB. 3.

M A D R A S : Printed by C H A R L E S F O R D.

MDCCLXXXVII.

TO SIR JOSEPH BANKS Baronet

President of the Royal Society.

DEAR SIR,

I CONCLUDED my last Letter with a supposition, that enough had been written to enable those who are fond of Natural Knowledge, to pursue the history of *Progall* Insects in this Country, farther, than it has been in my power to prosecute it;—yet, reflecting that my object, in dictating so many Letters, had been founded on a desire to excite a spirit of liberal enquiry in India—not to inform so learned a body as your Society,—I am still induced to regard, any further advances I may casually make in this subject, in the same point of view,—and request you will consider the liberty I have taken in addressing you, as merely an attempt to obtain that countenance, without which, any Knowledge I could pretend to in a matter so abstracted from my usual Avocations, could hardly be warranted in the eye of the Public.

In revising papers received before I had resolved to trouble the Press, I find a Letter from Mr. Wood Surgeon of his Majesty's 72d Regiment, at Tanjore, dated the 14th of January last, with some Insects found on the *Portia* Tree, which from the richness of colour he imagined were *Lac* Insects; they were shrivelled and dry from being conveyed so far, yet I could trace the envelope of Silk and abdominal rings sufficiently to declare them of the Cochineal kind.

Mr. Turings Letter of August 24th, recorded in mine of September 12th, being accompanied with the same insect found on the *Portia* Tree; I was much pleased a few days ago to find this Insect very numerous as well on the Bark, as the axis of the leaf of some *Portia* Trees in the Garden of Major Close of this Establishment, and within a Mile of Fort St. George, which on examination proves to be the *Coccus Oogenes*, defined in my Letter of the 25th Ultimo.

It appears therefore this *Coccus* exists in an extent of 500 Miles from Tanjore to Masulipatam, and can live on four different Plants (viz.) the *Phyllanthus Emblica*, *Minispermum Corajolium*, *Parietaria Indica*, and *Portia* Tree or *Malva Arborescens*.

The *Portia* Trees Major Close told me were only planted cuttings about a month ago, but had already put forth tender branches a foot in length—From conversation with the Major who has made great proficiency in the Hindostan Tongue, I learn that the *Opuntia* is known to them by the name *Jungley Runley*, of which I believe it is more proper, to take notice, as this Language is spoken by most Government Officers in every part of the Peninsula, and may help to assist our enquiries after the Cochineal Thistle.

Father



Father *Plumier*, from the *Sieur de Laet*, and his own observation, declared to the World in the Years 1692 and 1693, that Cochineal was an *Oviparous* Insect, which was found on various Trees in America, but that all kinds of Plants were not equally proper to supply them with Aliment capable of producing a thorough Redness, and therefore the Inhabitants of those Countries fed them on the *Opuntium* with Red juices, and that the choice for Cultivating Cochineal ought to be made of such, whose Fruit produces the finest Red juice.

The accounts of Father *Plumier* corresponded with the general opinion, but no sooner did he appear to establish a rational idea of the culture, than interested Men found it expedient to misrepresent him in France, and declare the Cochineal a Vegetable seed, of which some pretended disquisitions were given.

The notions of Mankind respecting Cochineal seem to have been in this manner perplexed with a doubt of its Vegetable or Animal Nature, till the Great *Lewenhoeck* by the help of his Glasses, discovered the six Legs of an Insect in the dried Specimens which he examined. But it is a melancholy truth that a Paper said to be written by a Cochineal Merchant of Amsterdam at this period, found its way into the Transactions of the ROYAL SOCIETY of London, to excite the wonder where, or how, such a number of little Insects could be collected, which impressed an opinion it was much more probable, the Cochineal Imported from New Spain was a Vegetable seed, than an Insect, and the full belief of what they could not see with their own eyes, was referred by the World, for the demonstration of *Progall* Insects by the illustrious *Reaumur*.

Since his time the great improvements in Natural History, approaching to an Anatomical description even of Insects, has furnished us with some of this Class in several Countries, which were like his *Progall* Insects *Viviparous*, but the accounts of Father *Plumier*, the *Coccus Adonidum* quoted by *Linnaeus*, from the memoirs of *Geoffroy*, the *Fauna Suecica*, and *Lederermüller*, with the account I have given of the *Coccus Cagones*, will serve to prove a variety in this particular.

Fort St. George,
Oct. 18th, 1787.

I am with much Esteem,

Dear Sir,

Your obedient Servant.

JAMES ANDERSON.

